Award Number: W81XWH-12-1-0385

TITLE: Evaluating a Novel Sleep-Focused Mind-Body Rehabilitative Program for Veterans with mTBI and Other "Polytrauma" Symptoms: An RCT Study

PRINCIPAL INVESTIGATOR: Yoshio Nakamura, Ph.D.

CONTRACTING ORGANIZATION: University of Utah, Salt Lake City, UT 84112

REPORT DATE: September 2015

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

R	REPORT DOC	UMENTATIO	N PAGE		Form Approved OMB No. 0704-0188		
Public reporting burden for this	s collection of information is esti	mated to average 1 hour per resp	oonse, including the time for revie		ching existing data sources, gathering and maintaining the		
this burden to Department of E 4302. Respondents should be	Defense, Washington Headquard e aware that notwithstanding any	ers Services, Directorate for Info	rmation Operations and Reports n shall be subject to any penalty	(0704-0188), 1215 Jeffe	ollection of information, including suggestions for reducing person Davis Highway, Suite 1204, Arlington, VA 22202- n a collection of information if it does not display a currently		
1. REPORT DATE		2. REPORT TYPE		_	DATES COVERED		
September 2015		Annual			Aug 2014 - 30 Aug 2015		
4. TITLE AND SUBTIT		ind Pady Dahahilita	tivo Drogram for Vot		CONTRACT NUMBER		
_	•	•	tive Program for Vet		1XWH-12-1-0385		
with m I BI and Oth	ner "Polytrauma" Sy	mptoms: An RCT S	itudy	5b.	GRANT NUMBER		
				5c.	PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)	o Dh D			5d.	PROJECT NUMBER		
Yoshio Nakamura, Ph.D.				56	TASK NUMBER		
				36.	TAON NOMBER		
E-Mail: yoshi.nakamura@utah.edu				5f. '	WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)					PERFORMING ORGANIZATION REPORT		
University of Utah					NOWIDER		
201 Presidents Cir. Rm 408							
Salt Lake City, UT	84112-9023						
a apolicopino (Ma	ANITODINO AOGNOVA	IAME(O) AND ADDRES	0(50)	10	ODONOOD/MONITORIO A ODONIVAVO		
	I Research and Ma	IAME(S) AND ADDRES	5(E5)	10.	SPONSOR/MONITOR'S ACRONYM(S)		
Fort Detrick, Mary		terier command					
Torr Detrick, Mary	Idild 21702 3012			11.	SPONSOR/MONITOR'S REPORT		
					NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT							
Approved for Public Release; Distribution Unlimited							
13. SUPPLEMENTAR	Y NOTES						
13. SUPPLEMENTARY NOTES							
14. ABSTRACT							
Fligible study parti	icinants are heing r	ecruited for the prop	nosed study and the	study is still o	ngoing		
Eligible study participants are being recruited for the proposed study and the study is still ongoing. There is no finding to report from the study as of 30/09/2015.							
There is no maining to report from the study as or 50/55/2515.							
15. SUBJECT TERMS							
	ntion, awareness tr	aining, mindfulness	, insomnia, sleep dis	sturbance, mile	d Traumatic Brain Injury (mTBI),		
OEF/OIF							
16. SECURITY CLASS	SIFICATION OF:		17. LIMITATION	18. NUMBER	19a. NAME OF RESPONSIBLE PERSON		
			OF ABSTRACT	OF PAGES	USAMRMC		
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (include area		
U	U	U	UU	4	code)		

Table of Contents

	<u>Page</u>
Introduction	3
Body	4
Key Research Accomplishments	4
Reportable Outcomes	4
Conclusion	4
References	4
Appendices	4

4. Introduction

Abstract: The purpose of the study is to evaluate and compare the clinical benefit of two sleep-focused therapeutic interventions: Mind-Body Bridging (MBB) and Supportive Education (SED) on sleep and comorbid mild Traumatic Brain Injury (mTBI) symptoms. We will recruit 142 OEF/OIF veterans with mTBI, who first will undergo a comprehensive evaluation performed by our medical and psychological staff, and then will be assigned to one of the two programs (MBB or SED). Each veteran will receive a total of 6 hours of treatment, in 2-hour sessions once a week over 3 consecutive weeks. Each patient will be evaluated again after treatment has ended. Three months after treatment ends, patients will have another evaluation. Six months after treatment ends, patients will complete follow-up questionnaires. These assessments will help us to evaluate both the efficacy of the therapy programs and any differences in individual treatment response. Additionally, the project will explore underlying mechanisms of action involved in treatment benefits resulting from MBB and SED by using both a biomarker of stress and a physiological measure of sleep (i.e., heart rate variability) as proxy indicators of intermediate mechanisms engaged by MBB and SED.

5. Body

We have continued our recruiting effort. We screened the patient lists obtained from Polytrauma Clinic at VA, sent recruitment letters and made phone calls to follow-up with the letters we sent. We repeatedly posted flyers and brochures at Salt Lake VA and other approved locations and distributed study information to OEF/OIF resource groups. We hired a LCSW to run Bridging groups. The amendment to request data from DoD was approved by local IRB. We are requesting data of OEF/OIF veterans who documented positive screen in TBI clinical reminder from DoD. We discussed the possibility of modifying inclusion and exclusion criteria with the DoD officials in April 2015, which was provisionally approved, pending necessary approval from local IRB and HRPO. We are currently preparing IRB amendment to include mTBI assessment in the screening evaluation. First and Second intervention group participants completed the study. Third group intervention participants completed the 3 month follow-up evaluations. Most fourth group intervention participants completed the post-intervention evaluation. We are planning to start the fifth group intervention in November.

6. Key Research Accomplishments

- continue recruiting of eligible study participants, hired LCSW for the study
- set up online survey (REDCap)
- amendment to request data from DoD approved
- preparing amendment to do mTBI assessment at the screening evaluation
- first and second intervention group participants completed the study.
- 35 Veterans consented to participated in the study
- 21 Veterans completed intervention sessions
- 20 Veterans completed post-intervention evaluation
- 13 Veterans completed 3 month follow-up evaluation
- 7 Veterans completed 6 month follow-up evaluation

7. Reportable Outcomes

Study enrollment is currently ongoing. We do not have any result yet to report here.

8. Conclusions

Study enrollment is ongoing, so we are currently not in a position to reach any conclusion regarding study aims and hypothesized benefits of the experimental intervention program (MBB) as of now. Following the provisional approval from the DoD grant officers concerning potential modifications of study procedures, we are in process of modifying inclusion and exclusion criteria for study participants so that the study will be able to contact veterans who indicated positive screen in TBI clinical reminder at the time of discharge from the military, provided that these veterans are not currently receiving care through VASLCHCS. We plan to submit IRB amendment application to our local IRB in early October 2015.

9. References

None

10. Appendices

None

11. Supporting Data

None